REMARKS:

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, are respectfully requested in light of the remarks which follow.

Objections to the specification and claims

As requested by the Examiner, Table II has been revised to include sequence identifiers and a paragraph setting forth the priority information has been included as the first sentence of the application. In addition, claims 49, 52, 53, 56, 57, 59 and 63 have been revised to address various informalities. Accordingly, withdrawal of the objections is believed to be in order.

Enablement rejection under 35 U.S.C. § 112, first paragraph

Claim 43 was rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Office Action asserted that a deposit of the DNA material recited by claim 43 in accordance with the provisions of the Budapest Treaty was needed. The undersigned confirms that the strain corresponding to accession number LMBP 3986 has been made in accordance with the Budapest Treaty, and that this strain will be irrevocably and without restriction or condition released to the public upon the issuance of a patent from this application. The identifying information set forth in 37 CFR 1.809(d) can be found on page 21 of the specification.

Withdrawal of this rejection is therefore requested.

Indefiniteness rejection under 35 U.S.C. § 112, second paragraph

Claims 43-57, 66-69 and 71-73 were rejected under the second paragraph of 35 U.S.C. § 112 for alleged indefiniteness. The claims have been revised consistent with the Examiner's suggestions in order to more clearly set forth the claimed subject matter. Withdrawal of the indefiniteness rejection is therefore requested.

Rejection under 35 U.S.C. § 102(e)

Claims 58-73 were rejected under 35 U.S.C. § 102(e) as being anticipated by Baum et al. (U.S. Patent Application Publication 2003/0237111 A1). This rejection is traversed.

Independent claim 58 recites an isolated DNA encoding a protein with a molecular weight of about 60 to about 80 kD, comprising the amino acid sequence of SEQ ID NO:2 from amino acid position 1 to amino acid position 640. According to the Office Action, Baum et al. describes a nucleic acid encoding amino acids 1-640 of SEQ ID NO:2 of the present application. The Office Action refers in particular to SEQ ID NOs:62-63 of Baum et al. These sequences, however, are not pertinent to the claims.

SEQ ID NO:63 of Baum et al. is a polypeptide sequence with 1227 amino acid residues, and SEQ ID NO:62 is the nucleic acid sequence which encodes SEQ ID NO:63. The Baum et al amino acid sequence is not the same as SEQ ID NO:2 of the present application. See, for example, the Baum sequence residues at position 25 (Ala), 28 (Asn), 31 (Thr), 48 (Asp), 50 (Phe), 96 (Pro), 106 (His), 109 (Arg), 112 (Val), 116 (Thr), 118 (Asp) and 129 (Asn). None of these residues matches the corresponding residues in SEQ ID NO:2 of the present application, and there are numerous other mismatches through position 640. Thus, SEQ ID NOs:62-63 of Baum et al. cannot be considered as pertinent to SEQ ID NO:2 of the present invention.

It should be noted that SEQ ID NO:38 of Baum et al. is a polypeptide sequence which does have high degree of similarity to SEQ ID NO:2 of the present invention. The Baum et al. SEQ ID NO:38, however, is not prior art to the claimed subject matter.

The present application is a divisional of application Serial No. 09/739,243, filed December 19, 2000, which claims the benefit of priority from provisional Application No. 60/173,387, filed December 28, 1999. The claimed subject matter is described in provisional Application No. 60/173,387. Therefore, the priority date for the present claims is December 28, 1999.

Baum et al. is a divisional of application Serial No. 09/661,322, filed September 13, 2000. Hence, the Baum filing date is after the December 28, 1999 priority date of the present application. Baum et al also claims the benefit of priority of a provisional application – application No. 60/153,995, filed September 15, 1999. This provisional application, however, does not provide support for the SEQ ID NO:38 sequence which is described in the Baum et al. publication.

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The Baum provisional application sets forth 63 sequences, most of which are

polynucleotides encoding polypeptides of less than 100 amino acid residues. For example,

SEQ ID NO:38 of the Baum provisional application is a polypeptide having only 110 amino

acid residues, and has no apparent similarity to any portion of SEQ ID NO:2 of the present

application. Five of the sequences are longer: SEQ ID NO:6 (653 amino acids), SEQ ID

NO:28 (1156 amino acids), SEQ ID NO:30 (802 amino acids), SEQ ID NO:40 (1167 amino acids) and SEQ ID NO:63 (1227 amino acids). None of these longer sequences contains a

match to residues 1-640 of SEQ ID NO:2 of the present invention. Thus, the Baum et al

publication does not anticipate any of the claimed subject matter.

When properly evaluated for priority date, the Baum et al document (U.S. Patent

Application Publication 2003/0237111 A1) does not have a disclosure which can be used as

prior art against the DNA which encodes the SEQ ID NO:2 recited by the present claims.

Withdrawal of the § 102 rejection is therefore requested.

CONCLUSION:

From the foregoing, further and favorable action in the form of a Notice of Allowance

is believed to be next in order and such action is earnestly solicited.

In the event that there are any questions concerning this amendment or the application

in general, the Examiner is respectfully requested to telephone the undersigned so that

prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: November 28, 2005

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